

IN THE CLAIMS:

Please amend the claims as follows:

1. **(Currently Amended)** A part positioning method in which a part supported by a self-traveling machine is positioned with respect to a part fitting object, comprising the steps of:

setting on said part fitting object an engaging means provided on a tip end of a wire member which is possible to be pulled out and wound up;

detecting a pulled-out length of said wire member using a first sensor; and
emitting a pair of laser beams using a second sensor to form a detection area
and using a pair of light receivers to detect an existing location of said wire member in
said detection area; and

moving said self-traveling machine to eliminate relative positional discrepancies between said part fitting object and the part based on said detected pulled-out length
and said location of said wire member and;

fitting the part to said part fitting object in the state that the positional discrepancies are eliminated; and

after fitting the part to said part fitting object, removing and retrieving said engaging means from said part fitting object.

2. **(Currently Amended)** A part positioning apparatus for positioning a part supported by a self-traveling machine with respect to a part fitting object, comprising:

an engaging means being provided on a tip end of a wire member so as to be set on said part fitting object;

a sensed member for accommodating said wire member in such a state as to be pulled out and wound up;

a first sensor for detecting a pulled-out length of said wire member when said engaging means is set on said part fitting object;

a second sensor for detecting an existing location of said wire member when said engaging means is set on said part fitting object, wherein said second sensor comprises a pair of light projectors and a pair of light receivers, said pair of light projectors emit beams of lasers which intersect to form a detection area, said pair of light receivers detect a location of the wire passing through the detection area; and

a controller means for controlling a traveling amount of said self-traveling machine such that each of detection values said pulled-out length and said location of said first sensor and said second sensor, respectively, is in agreement with a corresponding reference value.